



U.S. Fish & Wildlife Service

## Kirtland's Warbler

*Wildlife Management Area*

## Summary

## Comprehensive Conservation Plan

*November 2009*

### Comprehensive Conservation Plan Completed

The Comprehensive Conservation Plan (CCP) for Kirtland's Warbler Wildlife Management Area (WMA) was signed on September 10, 2009, completing a planning process that began in 2006.

Management highlights include:

- Management of jack pine stands will shift toward a more ecologically-based approach that better emulates natural, wildfire-generated jack pine stands.
- The Service will explore opportunities for land exchange and consolidation with the state of Michigan and possibly the U.S. Forest Service. The Service and others involved in Kirtland's Warbler recovery believe that consolidation could increase the total area of land managed for the warbler as



*Cover of the Kirtland's Warbler WMA CCP*

well as increase efficiency for state and federal agencies.

This summary includes a general description of how the WMA will be managed in the future. A table that begins on page 6 shows differences between previous management and the management direction under the CCP.

Completing the CCP doesn't mean that we stop planning. Comprehensive conservation plans are revised at least every 15 years, and the U.S. Fish and Wildlife Service (Service) Manual requires refuges to update and revise

their plan sooner if habitat and wildlife monitoring suggest that revision is warranted.

A variety of people and organizations contributed their expertise and time to planning for Kirtland's Warbler WMA. We are grateful to everyone who took the time to attend a meeting, review the Draft CCP, or comment on the plan. By participating in the planning process, you contributed to improving habitat for Kirtland's Warbler and other wildlife that depend on jack pine habitat.

### See the CCP

You can view the full CCP on-line at: <http://www.fws.gov/midwest/planning/kirtland>

Paper copies and an electronic version of the plan are available at libraries throughout the area, including:

- Crawford County Library, Grayling, Michigan
- Harrison Community Library, Harrison, Michigan
- Gerrish-Higgins School District Public Library, Roscommon, Michigan
- West Branch District Library, West Branch, Michigan
- Michigan DNR Operation Service Center, Gaylord, Michigan
- Michigan DNR Operation Service Center, Roscommon, Michigan

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Interpretive sign, Kirtland's Warbler WMA. Photo credit: U.S. Fish & Wildlife Service

Copies of the plan are also available at Seney NWR. You can request a copy in a variety of ways:

E-mail Seney NWR: [Seney@fws.gov](mailto:Seney@fws.gov)

Call the Refuge: 906/586-9851

Mail a request to:

Seney NWR  
Attention: Kirtland's Warbler CCP  
1674 Refuge Entrance Road  
Seney, MI 49883

## Why a CCP?

The U.S. Fish and Wildlife Service is completing a CCP for all land within the National Wildlife Refuge System, typically national wildlife refuges, wildlife management areas, and wetland management districts. The plans outline how a station will fulfill its legal purpose and contribute to the Refuge System's wildlife, habitat and public use goals. Comprehensive conservation plans articulate management goals for the next 15 years and specify the objectives and strategies needed to accomplish these goals. CCPs give neighbors, local communities, Friends groups, outdoor recreation enthusiasts and others a clear picture of how a station will be managed and the rationale behind that direction.

Planning for national wildlife refuges has always occurred, but the planning process and products were not consistent throughout the Refuge System. This changed in 1997, when the National Wildlife Refuge System Improvement Act established the planning process refuges would use and specified the elements required in a CCP. The Improvement Act and

Service policy now require the Refuge System to manage national wildlife refuges based on a CCP.

Many factors, such as funding and natural events like flooding or drought, will influence the Service's ability to fully implement the Kirtland's Warbler WMA CCP. Comprehensive conservation plans outline management direction, but they do not constitute a commitment for staffing increases, operational and maintenance increases, or funding for future land acquisition.

## Vital Statistics

Kirtland's Warbler WMA was established in 1980 in response to the need for more land dedicated to the recovery of the Kirtland's Warbler. The Service established the wildlife management area in part due to the recommendations of the Kirtland's Warbler Recovery Team. The original goal was to acquire 7,500 acres of land on which habitat would be managed for the benefit of Kirtland's Warbler. At present, the area contains 125 separate tracts totaling 6,684 acres (see the figure on the next page). While management for Kirtland's Warbler is paramount, the WMA provides habitat for a diversity of wildlife species, both migratory and non-migratory.

The staff at Seney NWR oversee the WMA and provide limited services on an as-needed basis. These duties include, but are not limited to, administration of timber sales, coordinating with the state on harvesting and replanting efforts, participation in Kirtland's Warbler Recovery Team efforts, research, the Kirtland's Warbler census, Brown-headed Cowbird trapping, public education, and on-site law enforcement.

## Refuge Vision and Goals

### Refuge Vision

The planning team considered the past vision statements and emerging issues and drafted the following vision statement as the desired future state for the Kirtland's Warbler WMA:

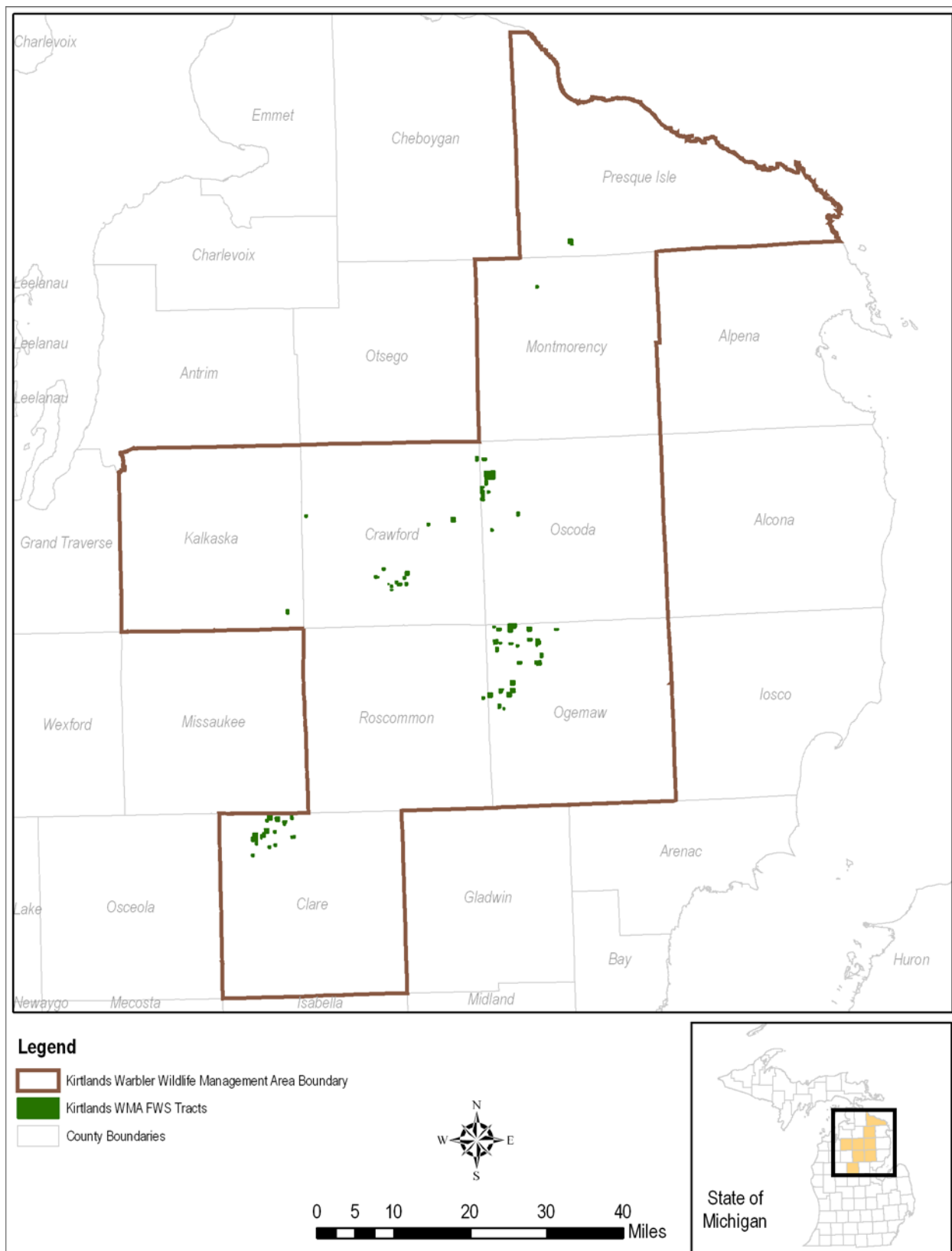
The Kirtland's Warbler Wildlife Management Area will be managed to promote jack pine ecosystems that contribute to a sustainable population of Kirtland's Warblers and associated wildlife species. Lands will be actively managed to mimic historic disturbance regimes and resulting structural and compositional attributes, such as dense stands of jack pine with barren-like openings, snags and coarse woody debris. Research will be encouraged and the public will be invited to learn about the jack pine ecosystem and the wildlife it supports.

### Refuge Management Goals

Three goals were established for Kirtland's Warbler WMA:

Goal 1: Wildlife – Management will play an integral role in the recovery of the Kirtland's Warbler. Kirtland's Warbler WMA lands will support the broad array of wildlife species that are dependent on each seral stage of the jack pine ecosystems (from barrens to mature jack pine).

## Location of Parcels Within the Kirtland's Warbler WMA



## Sites Identified for Potential Exchange

Location	Concept	Potential Sites
Northern Lower Peninsula	Large acreage of Service lands currently exists. Exchanges would include Michigan DNR and Service lands only and would create fewer and larger parcels.	<ul style="list-style-type: none"> <li>■ Pere Cheney Management Area - Staley Lake Mgmt. Area,</li> <li>■ NW Ogemaw Management Area,</li> <li>■ Leota Management Area,</li> <li>■ Big Creek Management Area</li> </ul>
Northern Lower Peninsula	Create fewer and larger parcels closer to Seney NWR, but still within the northern lower Peninsula. Exchanges would include only Michigan DNR and Service lands.	<ul style="list-style-type: none"> <li>■ Clear Lake</li> </ul>
Northern Lower Peninsula	Consolidate into fewer, larger parcels and include Service, Forest Service and Michigan DNR lands.	<ul style="list-style-type: none"> <li>■ Wurtsmith Block to Forest Service, Michigan DNR gets all Service lands, and Service gets unidentified Forest Service lands (multiple compartments).</li> </ul>
Upper Peninsula	Maintain close proximity to Seney NWR; opportunity to use prescribed fire as a management tool; minimal impact to existing ORV trails. Consolidation will only involve Service and Michigan DNR lands.	<ul style="list-style-type: none"> <li>■ M-94 southwest of Seney NWR,</li> <li>■ M-28 lands north of Seney NWR,</li> <li>■ Danaher Plains Complex,</li> <li>■ Ishpeming Area,</li> <li>■ Big Two-Hearted River Country,</li> <li>■ Private lands purchased in the Upper Peninsula by Michigan DNR going to the Service, Michigan DNR getting northern Lower Peninsula Service lands,</li> <li>■ Baraga Plains,</li> <li>■ Yellow Dog Plains.</li> </ul>

Goal 2: Habitat – Manage habitat to support Kirtland’s Warblers and associated wildlife species by providing near benchmark conditions across all seral stages of the jack pine ecosystem. Employ sound management practices that emulate patterns of structure and composition resulting from wildfire and other natural disturbances.

Goal 3: People – Encourage the public to explore jack pine ecosystems and learn about its associated wildlife.

## How the WMA Will be Managed

Future management will focus on two approaches to improving habitat for Kirtland’s Warbler:

- Manage existing lands in a manner that better mimics natural jack pine communities, and

- Explore opportunities to exchange land with the state of Michigan for the purpose of consolidating DNR and WMA parcels.

The management of jack pine stands will shift away from plantations toward a more ecologically-based approach that better emulates natural, wildfire-generated jack pine stands.

Management will emphasize a more holistic approach to jack pine ecosystem management that will be based on benchmark conditions derived from jack pine stands regenerated by wildfire. Management will include emulating wildlife-produced jack pine stand composition and structural patterns that result in greater biodiversity. Timber harvests will try to better emulate wildfire-produced stand conditions and range of regeneration options will be used, including prescribed fire when and where possible.

The Service will continue working with the Michigan DNR on habitat management.

The Service will also explore land exchange with the state and possibly the U.S. Forest Service to consolidate Department of Natural Resources and WMA parcels.

Proposed land exchanges would likely increase the total area of land managed for Kirtland’s Warbler, as well as increase management efficiency by both federal and state agencies. The table above describes sites that have been discussed.

Existing lands and any new lands acquired through exchange would be managed to benefit the Kirtland’s Warbler and other native flora and fauna of jack pine ecosystems.

As an example, if consolidation were to occur and the Service obtained upland jack pine stands in the eastern Upper Peninsula, prescribed fire would be a more likely management tool.

## Who We Are and What We Do

Kirtland's Warbler WMA is administered by the U.S. Fish and Wildlife Service, the primary federal agency responsible for conserving, protecting, and enhancing the nation's fish and wildlife populations and their habitats. The Service oversees the enforcement of federal wildlife laws, management and protection of migratory bird populations, restoration of nationally significant fisheries, administration of the Endangered Species Act, and the restoration of wildlife habitat such as wetlands. The Service also manages the National Wildlife Refuge System, which was founded in 1903 when President Theodore Roosevelt designated Pelican Island in Florida as a sanctuary for Brown Pelicans.

Today, the Refuge System is a network of 550 national wildlife refuges and other Refuge System units covering more than 150 million acres of public lands and waters. Overall, the Refuge System provides habitat for more than 5,000 species of birds, mammals, fish, and insects.

Refuges also provide unique opportunities for people. When activities are compatible with wildlife and habitat conservation, refuges are places where people can enjoy wildlife-dependent recreation such as hunting, fishing, wildlife observation, photography, environmental education, and environmental interpretation.

## The Planning Process

Work on the Kirtland's Warbler WMA has involved a number of individuals and agencies.

Planning began in March 2006 with members of the Service's Regional planning staff and Seney NWR staff identifying issues and concerns confronting Kirtland's Warbler WMA. Refuge staff and Service planners then asked neighbors, organizations, local government units, and interested citizens to share their thoughts in an open house and through written comments. The Service hosted an open house at Kirtland's Community College in Roscommon, Michigan, in August 2006. Four people attended the meeting and a total of six comments were received during the scoping process.

The Kirtland's Warbler Recovery Team also met and contributed thoughts on alternatives for managing the WMA. In April 2008, representatives of the Recovery Team and state and federal agencies met to discuss the possibility of consolidating Kirtland's Warbler WMA lands by exchanging lands with the Michigan DNR and/or the U.S. Forest Service.

The Kirtland's Warbler draft Comprehensive Conservation Plan and Environmental Assessment was prepared by a team from Seney NWR, the Service's Regional Office in Minneapolis and a representative of the Michigan DNR. The Draft CCP/EA was released for public review on April 3, 2009; the comment period ended May 15, 2009. The Service received five written comments on the Draft CCP/EA.

Verbal and written comments received by the Service were incorporated where appropriate.

The CCP will guide management on the WMA over the coming 15-year period. It will guide the development of more detailed step-down management plans for specific resource areas, and it will underpin the annual budgeting process through Service-wide allocation databases. Most importantly, it lays out the general approach to managing habitat,

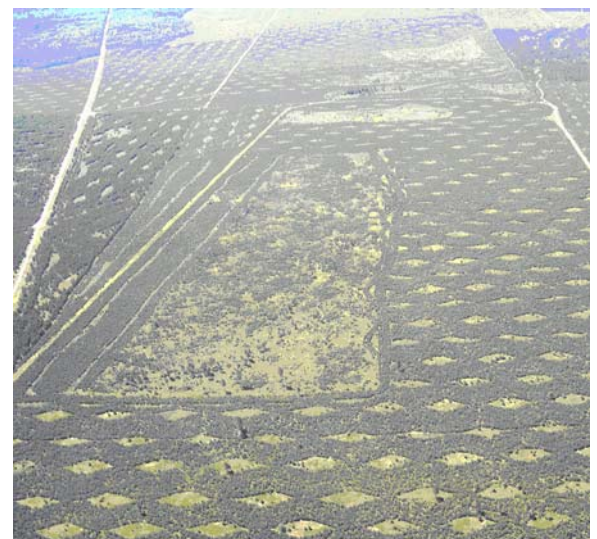
wildlife, and people at the Kirtland's Warbler WMA that will direct day-to-day decision-making and actions.

## Into the Future

Throughout the comprehensive conservation planning process, many people have contributed time and ideas to make the CCP for Kirtland's Warbler WMA a better document. We are grateful to everyone who cared enough about the Wildlife Management Area and its future to participate in this planning effort.

To succeed, a management plan has to adapt to nature's ever changing conditions. Although the plan is complete, we expect to review it and, if needed, update it every 5 to 10 years in response to conditions that could not be anticipated in planning.

Kirtland's Warbler WMA has been instrumental in the recovery of Kirtland's Warbler. Whether the Service, the state of Michigan and possibly the Forest Service pursue consolidation or not, we fully expect the CCP to improve jack pine habitat and, with it, improve the status of the Kirtland's Warbler.



*Patch cutting jack pine. Photo credit: U.S. Fish and Wildlife Service*

**Table 1: Comparison of Previous Management and Management Under the CCP, Kirtland's Warbler WMA**

Previous Management	Management Under the CCP
Goal 1: Wildlife – Management will play an integral role in the recovery of the Kirtland's Warbler. Kirtland's Warbler WMA lands will support the broad array of wildlife species that are dependent on each seral stage of the jack pine ecosystems (from barrens to mature jack pine).	
<b>Objective 1.1:</b> Continue to be an active partner in the Kirtland's Warbler recovery effort.	<b>Objective 1.1:</b> Same as Alternative 1.
<i>Strategies:</i> <ul style="list-style-type: none"> <li>■ Participate in the annual Kirtland's Warbler census to aid in monitoring the population trends.</li> <li>■ Work with Ecological Services to continue annual trapping efforts to remove Brown-headed Cowbirds from nesting areas and explore new ways to eliminate cowbirds parasitism of Kirtland's Warbler nests.</li> <li>■ Coordinate harvest and regeneration of jack pine, on Kirtland's Warbler WMA lands with the, Michigan DNR to insure that the Services lands are contributing to the Kirtland's Warbler recovery effort.</li> <li>■ Conduct and participate in research to better understand the ecology and management of Kirtland's Warbler populations.</li> </ul>	<i>Strategies:</i> Same as Previous Management
Objective 1.2: By 2016, implement a monitoring program to track the presence, abundance, population trends, and/or habitat associations of Trust Resources and determine ways to emulate natural species diversity.	Objective 1.2: Same as Previous Management.
<i>Strategies:</i> <ul style="list-style-type: none"> <li>■ Determine the presence, abundance and habitat associations of Trust Resources currently using Kirtland's Warbler WMA lands.</li> <li>■ Develop and implement a monitoring program to track population trends, and/or habitat associations of Trust Resources.</li> <li>■ Conduct annual reviews of trends to determine if there are priorities for research or management.</li> <li>■ If a Trust Resource research or management issue is identified, initiate action at the local level. If the issue goes beyond the boundary of the Kirtland's Warbler WMA, take lead role in coordinating with federal, state, and NGO partners to develop broader scale projects to resolve issues.</li> </ul>	<i>Strategies:</i> Same as Previous Management
Goal 2: Habitat – Manage habitat to support Kirtland's Warblers and associated wildlife species by providing near benchmark conditions across all seral stages of the jack pine ecosystem. Employ sound management practices that emulate patterns of structure and composition resulting from wildfire and other natural disturbances.	
<b>Objective 2.1:</b> Continue to manage jack pine stands in conjunction with Michigan DNR, but place greater emphasis on promoting ecological integrity within managed stands.	<b>Objective 2.1:</b> Continue to manage jack pine stands in conjunction with Michigan DNR, but place greater emphasis on promoting ecological integrity within managed stands.

Myers Cabin, Muscatatuck NWR. U.S. Fish and Wildlife Service photo.

**Table 1: Comparison of Previous Management and Management Under the CCP, Kirtland's Warbler WMA**

Previous Management	Management Under the CCP
<p><i>Strategies:</i></p> <ul style="list-style-type: none"> <li>■ Work with federal, state and local officials to garner support for the use of prescribed fire in the management of jack pine to create Kirtland's Warbler nesting habitat.</li> <li>■ Work with federal, state and local fire officials to employ prescribed fire as a management tool where it can be applied safely without risk to life and property.</li> <li>■ Elsewhere, attempt to emulate the compositional and structural patterns of jack pine stands resulting from wildfire through mechanical treatments (i.e. timber sales). Place increased emphasis on maintaining "legacy" trees (e.g., large red and white pine, red and white oak, etc.) and providing more (and larger) standing snags and coarse woody debris.</li> <li>■ Parcels that contain habitats other than jack pine will be managed to emulate patterns resulting from natural disturbances.</li> <li>■ Develop research demonstration sites that exemplify ecologically-based jack pine management and illustrate how emulating natural conditions can provide multiple species benefits.</li> <li>■ Develop a map and monitor spotted knapweed distribution within and near Kirtland's Warbler WMA parcels. Initiate removal if the species spreads into nesting areas.</li> </ul>	<p><i>Strategies:</i></p> <p>Same as Previous Management.</p>
Not Applicable	<p><b>Objective 2.2: Land Consolidation</b> – Within 5 years of completion of this CCP, develop a land consolidation plan for the Kirtland's Warbler WMA that maintains or increase habitat for the warbler and increase management efficiency for all agencies involved.</p>
	<p><i>Strategies:</i></p> <ul style="list-style-type: none"> <li>■ Interagency team will follow land consolidation guidelines to establish priority exchange scenarios</li> <li>■ Land appraisals, following federal and state guidelines, will be conducted on all lands identified for exchange.</li> </ul>
Goal 3: People – Encourage the public to explore jack pine ecosystems and learn about its associated wildlife.	
<p><b>Objective 3.1 – Hunting:</b> Provide the public with opportunities to hunt on Kirtland's Warbler WMA lands in accordance with state and federal regulations.</p>	<p><b>Objective 3.1 – Hunting:</b> Same as Previous Management.</p>
<p><i>Strategies:</i></p> <ul style="list-style-type: none"> <li>■ Increase law enforcement on Service properties to ensure consistency with federal hunting regulations (e.g. no deer baiting, permanent blinds, bear hunting with dogs, and off-road vehicle use).</li> <li>■ In cooperation with the Michigan DNR, produce maps to show the hunting public areas subject to federal regulations.</li> </ul>	<p><i>Strategies:</i></p> <p>Same as Previous Management.</p>

**Table 1: Comparison of Previous Management and Management Under the CCP, Kirtland's Warbler WMA**

Previous Management	Management Under the CCP
<p><b>Objective 3.2 – Wildlife Observation, Wildlife Photography, Environmental Education and Environmental Interpretation:</b> Within 5 years of approval of the plan, increase opportunities for wildlife observation and photography, environmental education and interpretation to correspond with an increase (from 2008 level) in WMA visitation. The level of knowledge about, and the positive attitude toward, the WMA will increase among visitors throughout the next 15 years.</p>	<p><b>Objective 3.2 – Wildlife Observation, Wildlife Photography, Environmental Education and Environmental Interpretation:</b> Same as Previous Management.</p>
<p><i>Strategies:</i></p> <ul style="list-style-type: none"> <li>■ Continue active support of the annual Kirtland's Warbler Festival and Tours.</li> <li>■ Encourage wildlife-dependent activities on Kirtland's Warbler WMA lands by providing outreach materials, such as brochures and displays, at local public events and in community facilities.</li> </ul>	<p><i>Strategies:</i></p> <p>Same as Previous Management.</p>